



puppet
labs

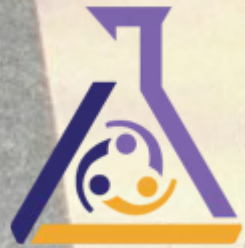
The Puppet Show

Alec Warner <antarus@gentoo.org>

Theo Chatzimichos <tampakrap@gentoo.org>



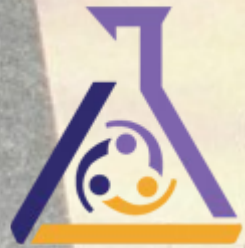
Preparation



- Workshop participation
- You need puppet installed in your system
 - emerge -av app-admin/puppet
 - zypper in puppet
 - apt-get install puppet
- You also need to download the tarball with the examples
 - http://miniconf.gentoo.org/puppet_examples.tar.bz2



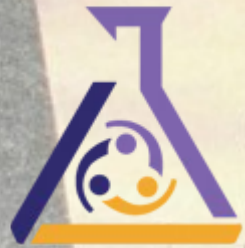
The problem



- Let's say we have a bunch of servers
- Custom scripts to administer them
- Touching config files manually
- Duplication of work even in servers with same Operating System / same services
- No history of the changes
- Hard to communicate between sysadmins
- Impossible to review changes
- Impossible to automate testing/QA



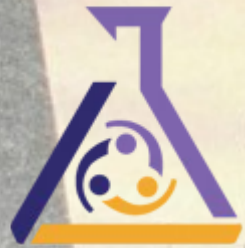
The solution



- A central storage place for all the configs
- Easy and secure distribution of the configs along the servers
- Categorize the servers / services
- Conditions of the installed configs per server / service
- History, revisions, diff ...
- Handle misc files, users, cronjobs, runlevels etc
- Support different operating systems

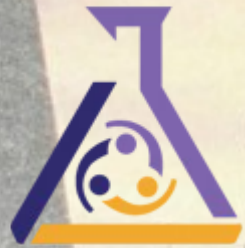


What is Puppet



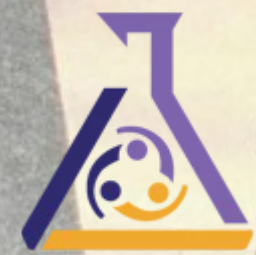
- Central Configuration management system
- IT automation software
- ... and it supports every dot of the previous slide :)
- Open Source, Written in Ruby
- Has its own simple declarative language
- Manifests, modules
- Custom data types in ruby
- Text files (filebucket), smoke tests, templates

What is Puppet

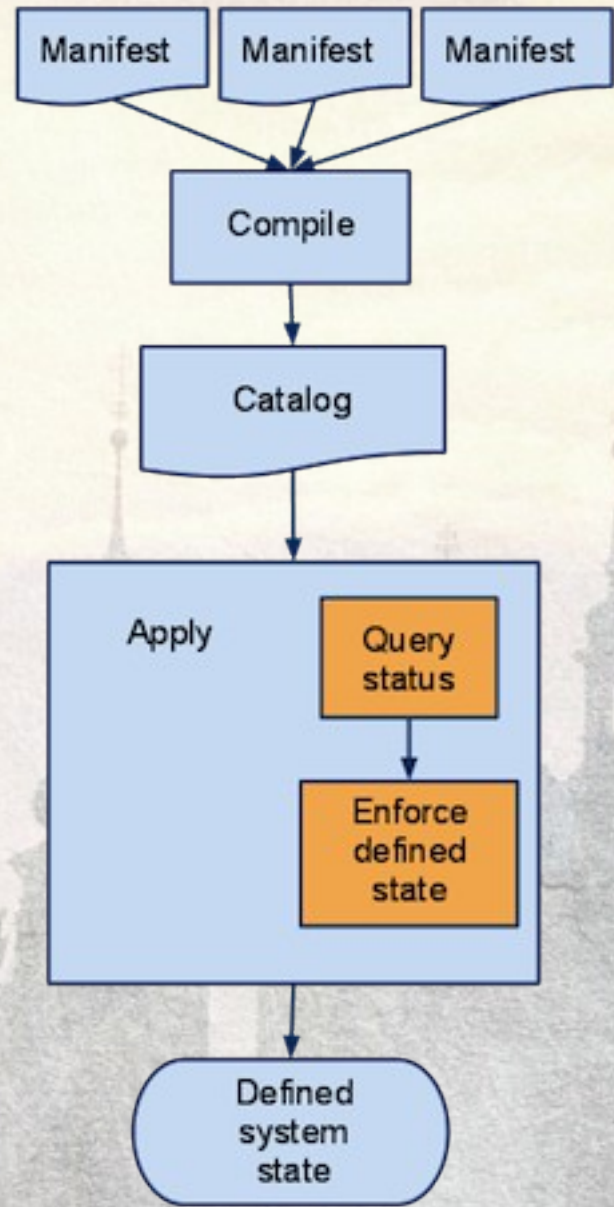


- Community oriented
 - Puppetdashboard / Puppet forge
 - IRC / mailing lists
 - Puppet Camp / PuppetConf / Puppet User Groups & Devops Groups
- Puppet Enterprise
- PuppetLabs



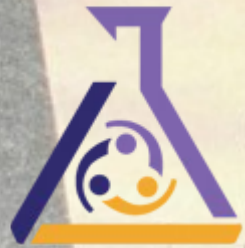


Process





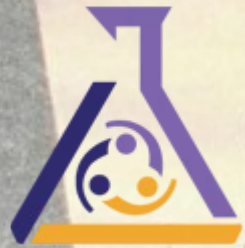
Gentoo Module



- Puppet portage provider is not sufficient
- It doesn't trigger re-emerge on SLOT or USE flag change
- Gentoo Infra team tries to push some hacky scripts to either portage or puppet/ruby
- OSUOSL started a Gentoo module that covers our needs
- We are slowly cleaning it up
- <https://github.com/adrienthebo/puppet-gentoo>



Let's code!



- Example: Puppetmaster distributes a simple manifest to several agents, running different OS
- Then we are going to write a few simple manifests
- You need puppet installed in your system
 - emerge -av app-admin/puppet
 - zypper in puppet
 - apt-get install puppet
- You also need to download the tarball with the examples
 - http://miniconf.gentoo.org/puppet_examples.tar.bz2